

FIG. 1
(PRIOR ART)

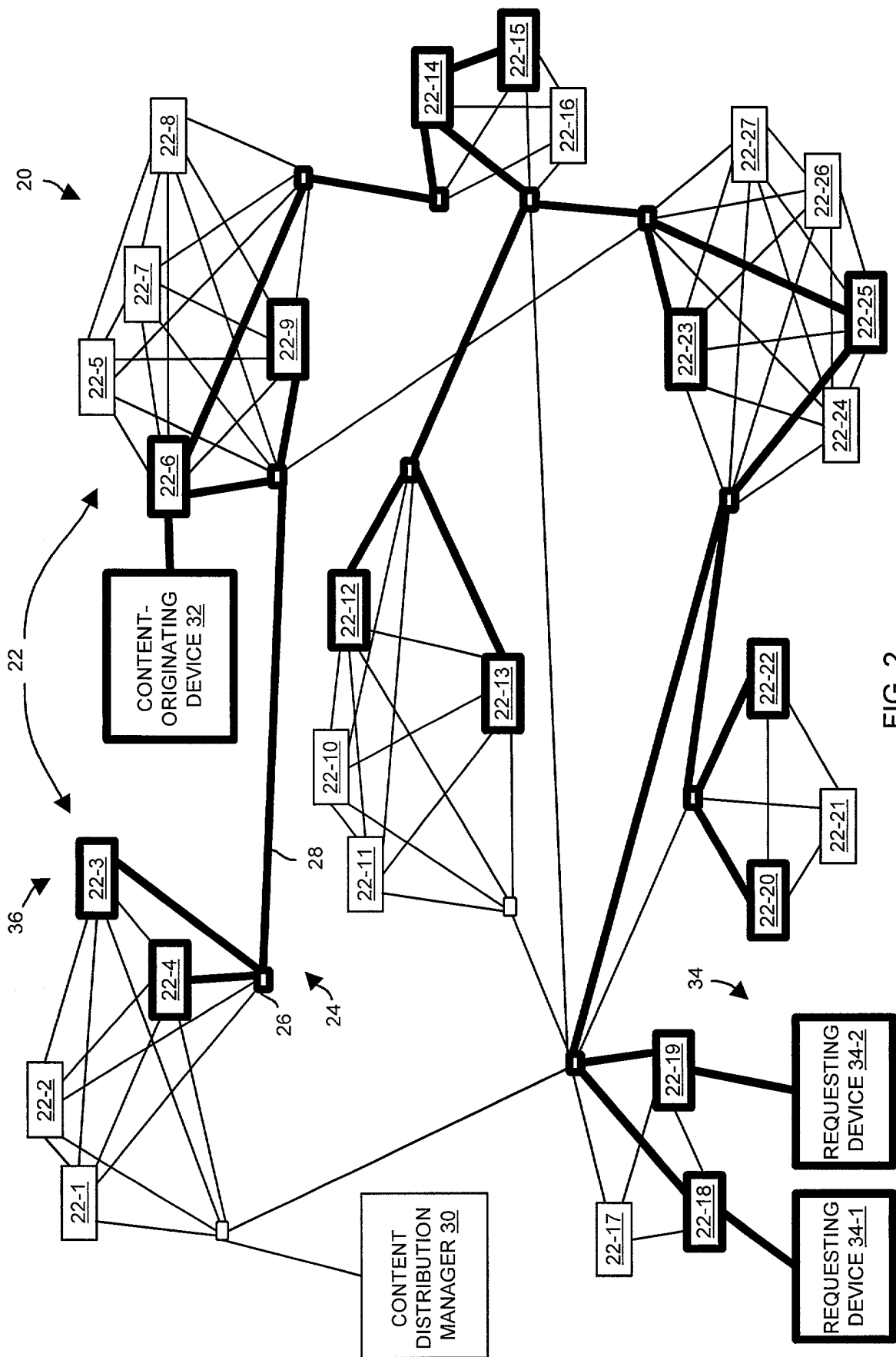


FIG. 2
(PRIOR ART)

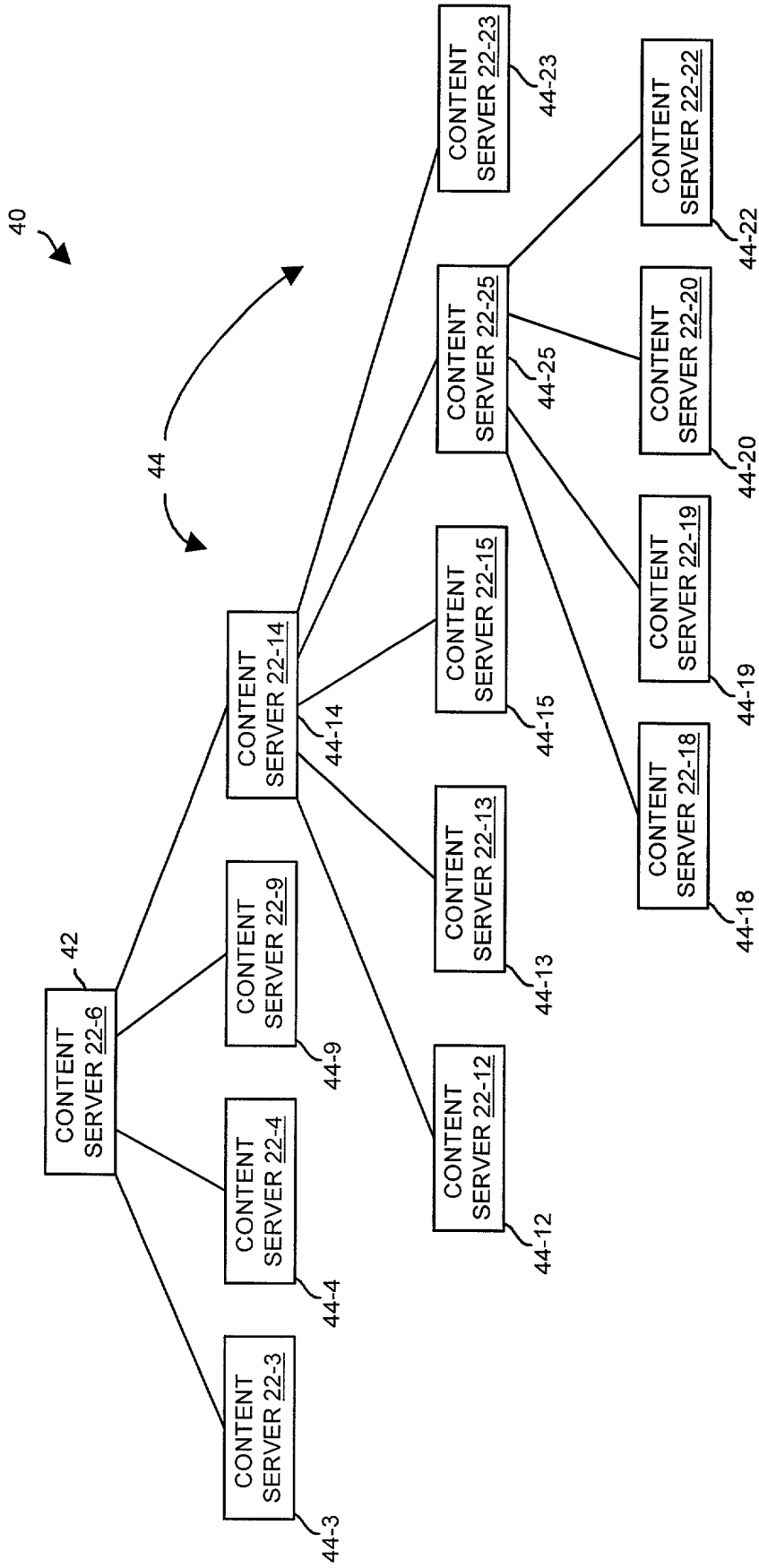


FIG. 3
(PRIOR ART)

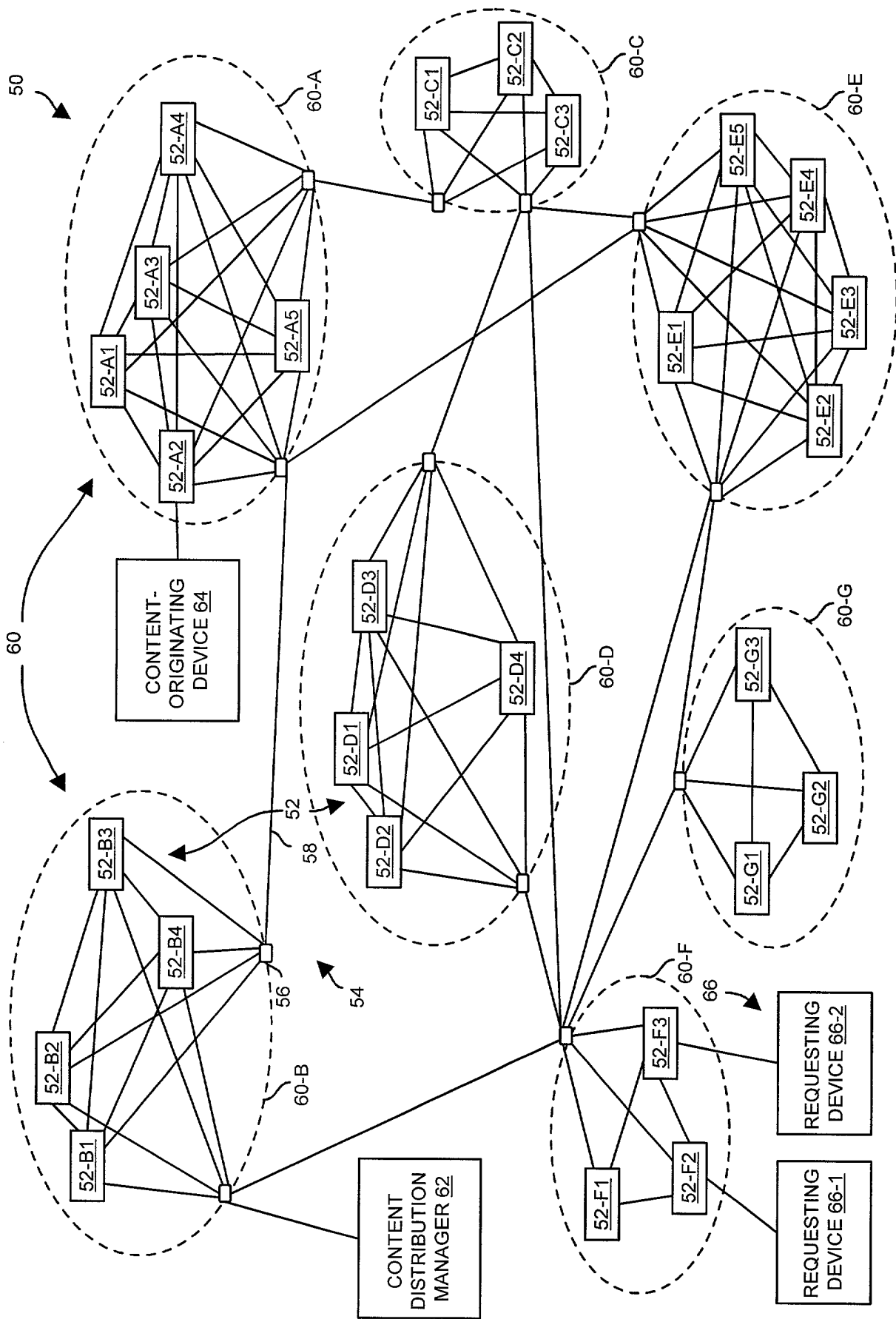


FIG. 4

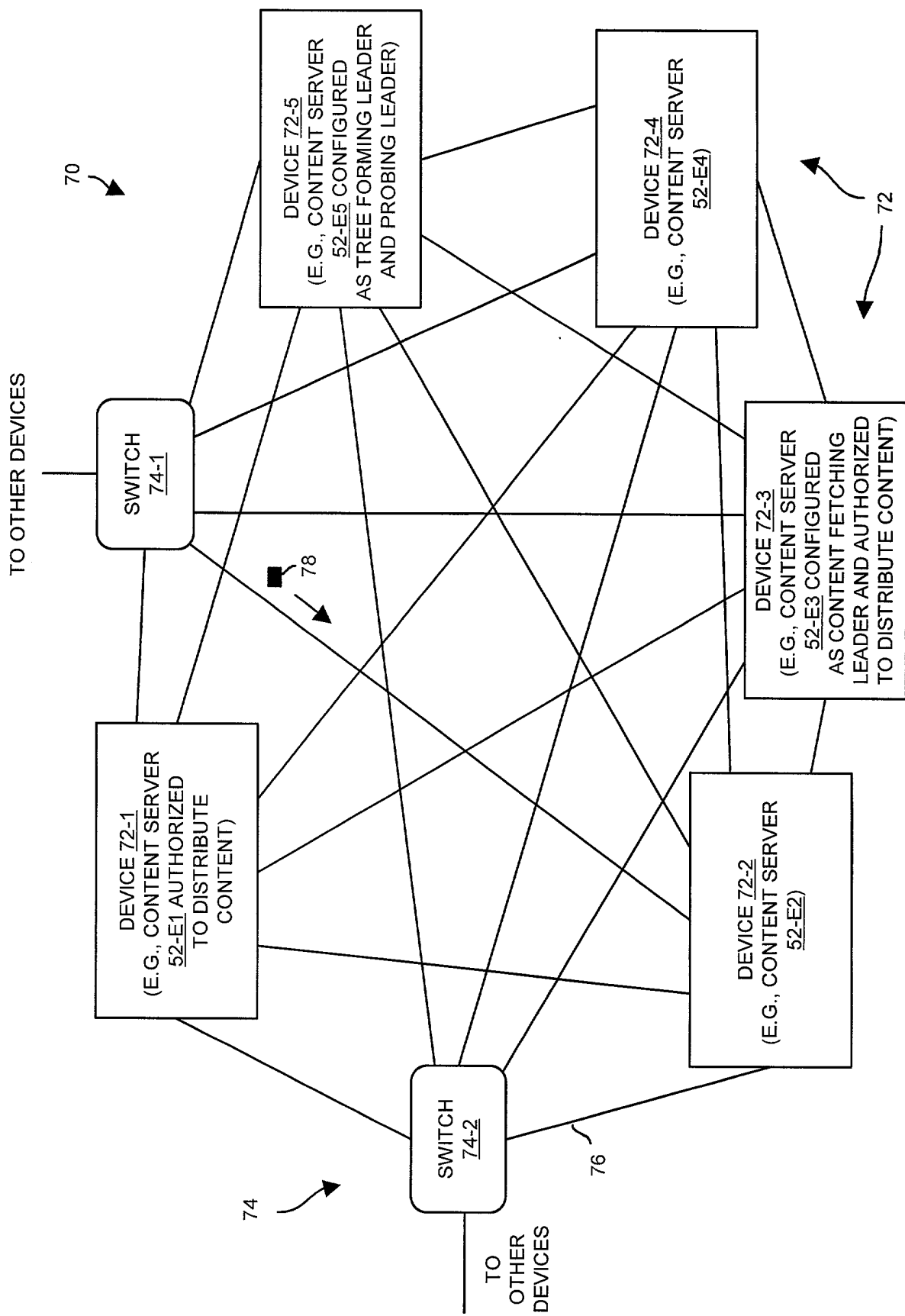


FIG. 5

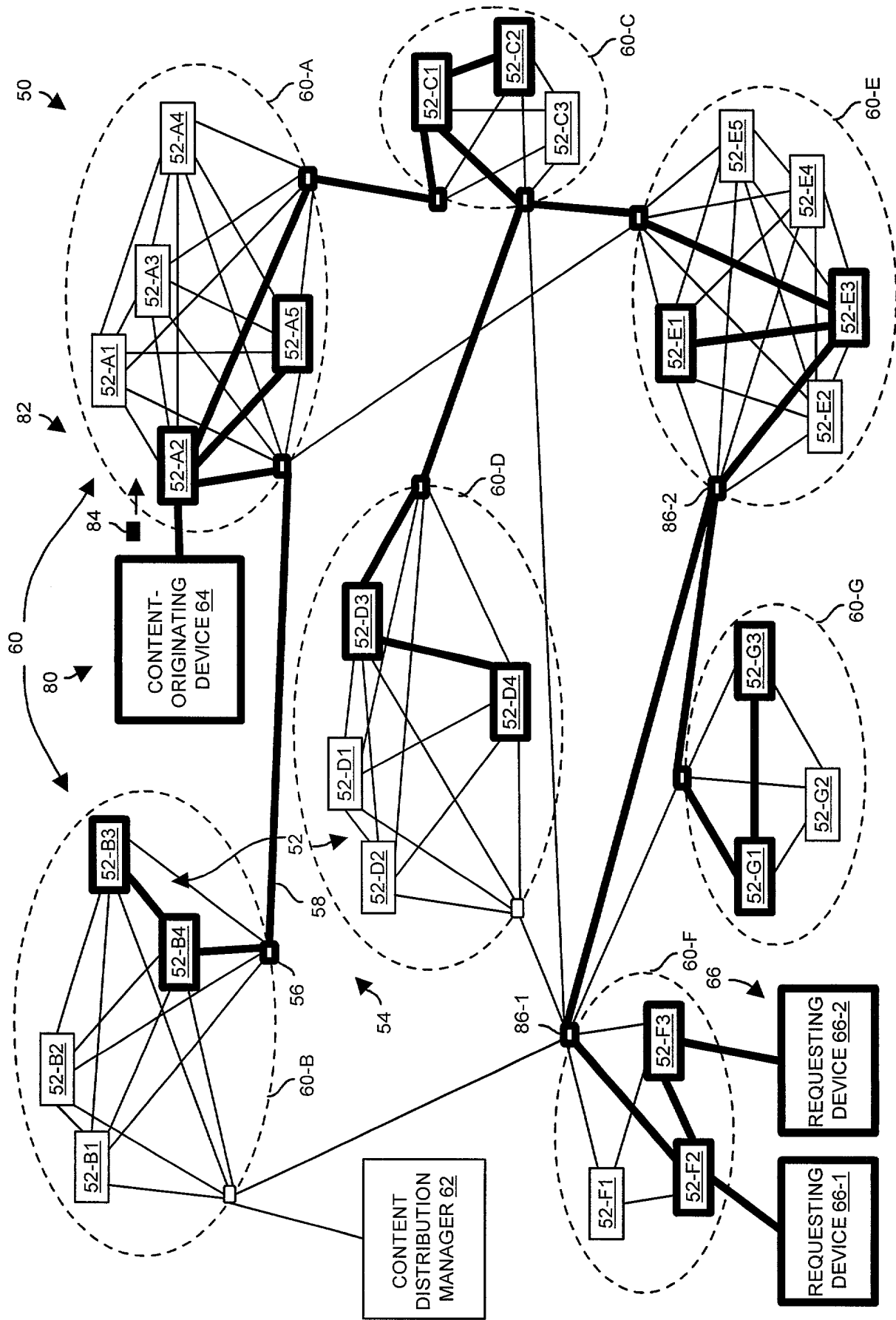


FIG. 6

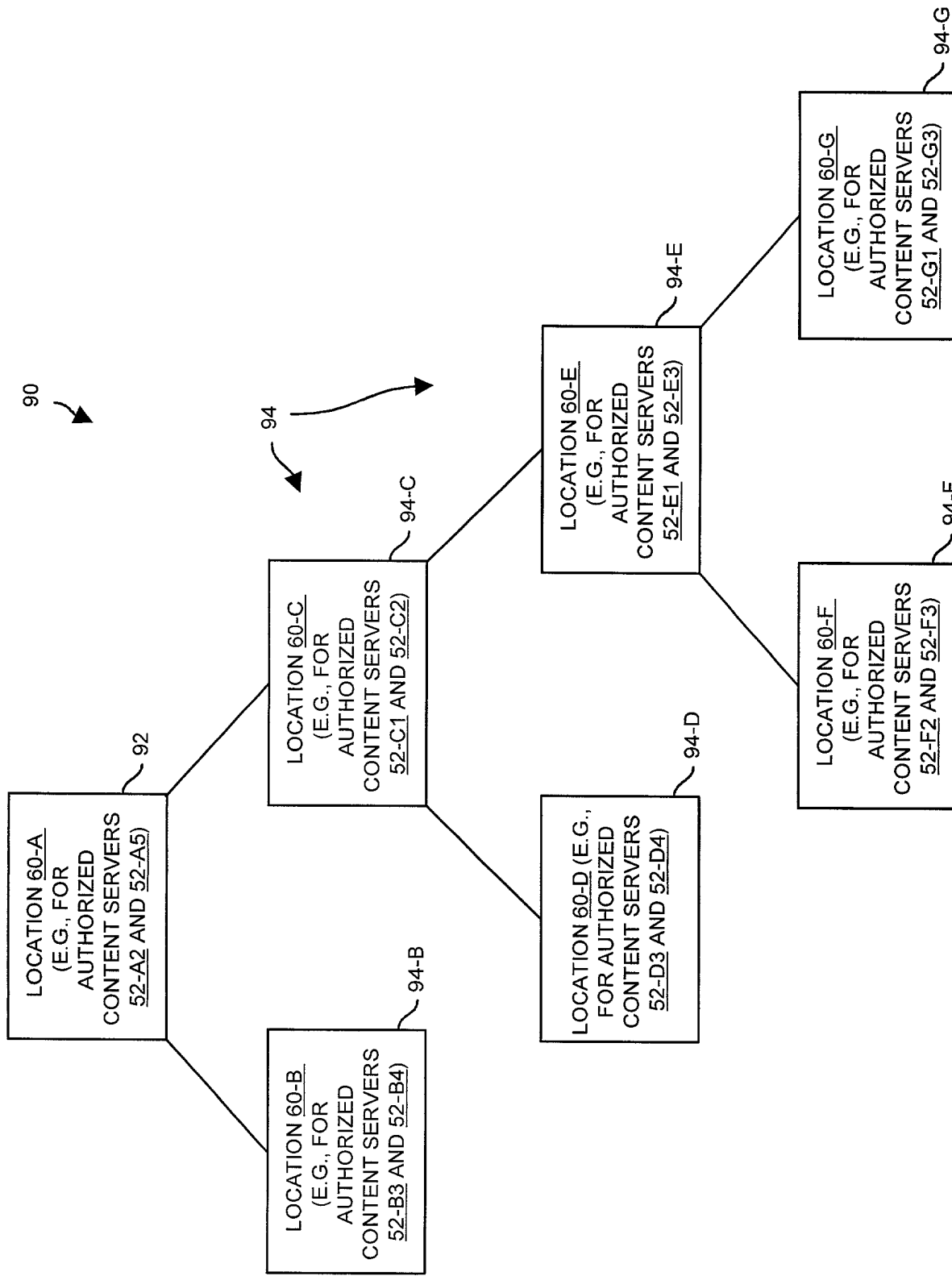


FIG. 7

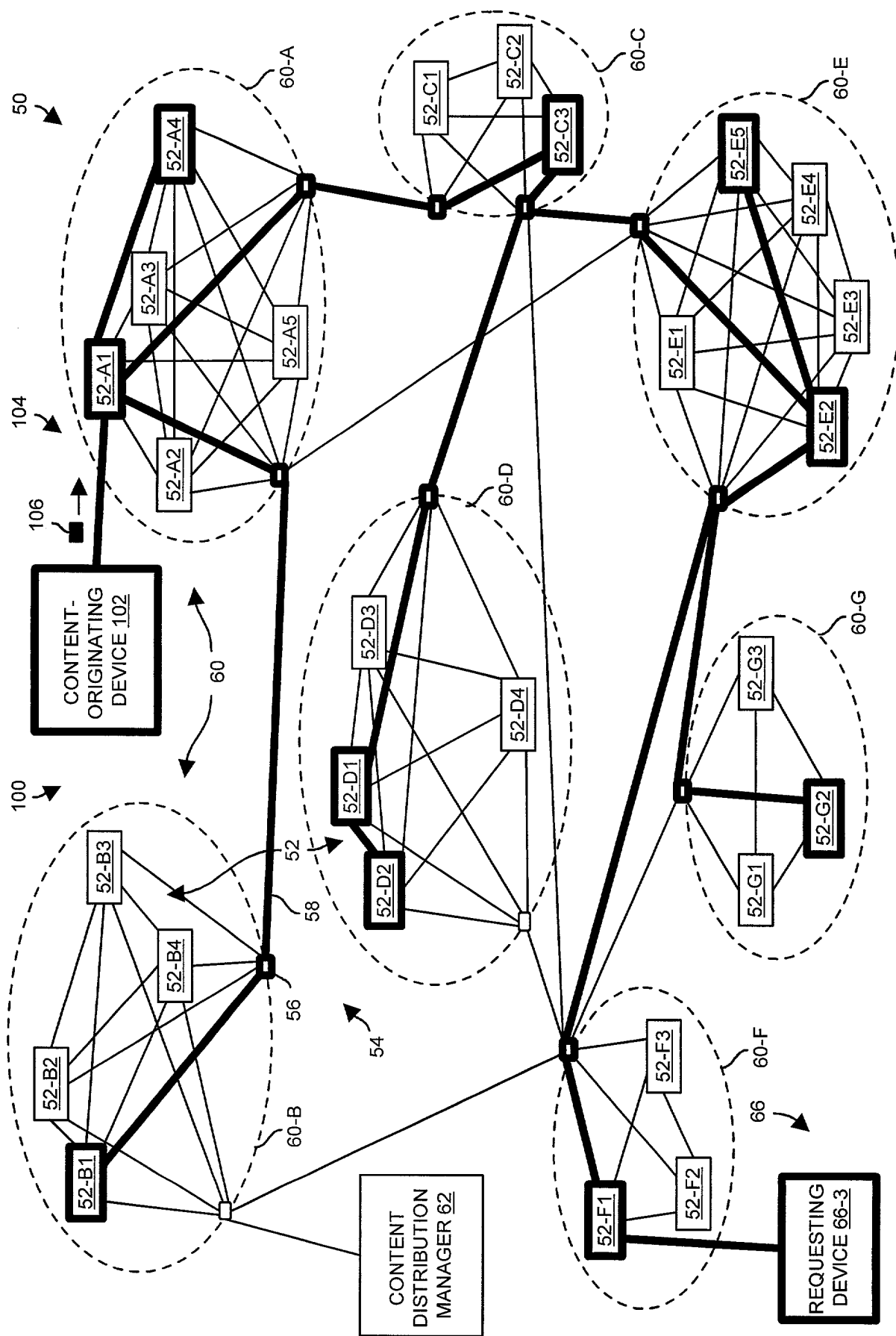


FIG. 8

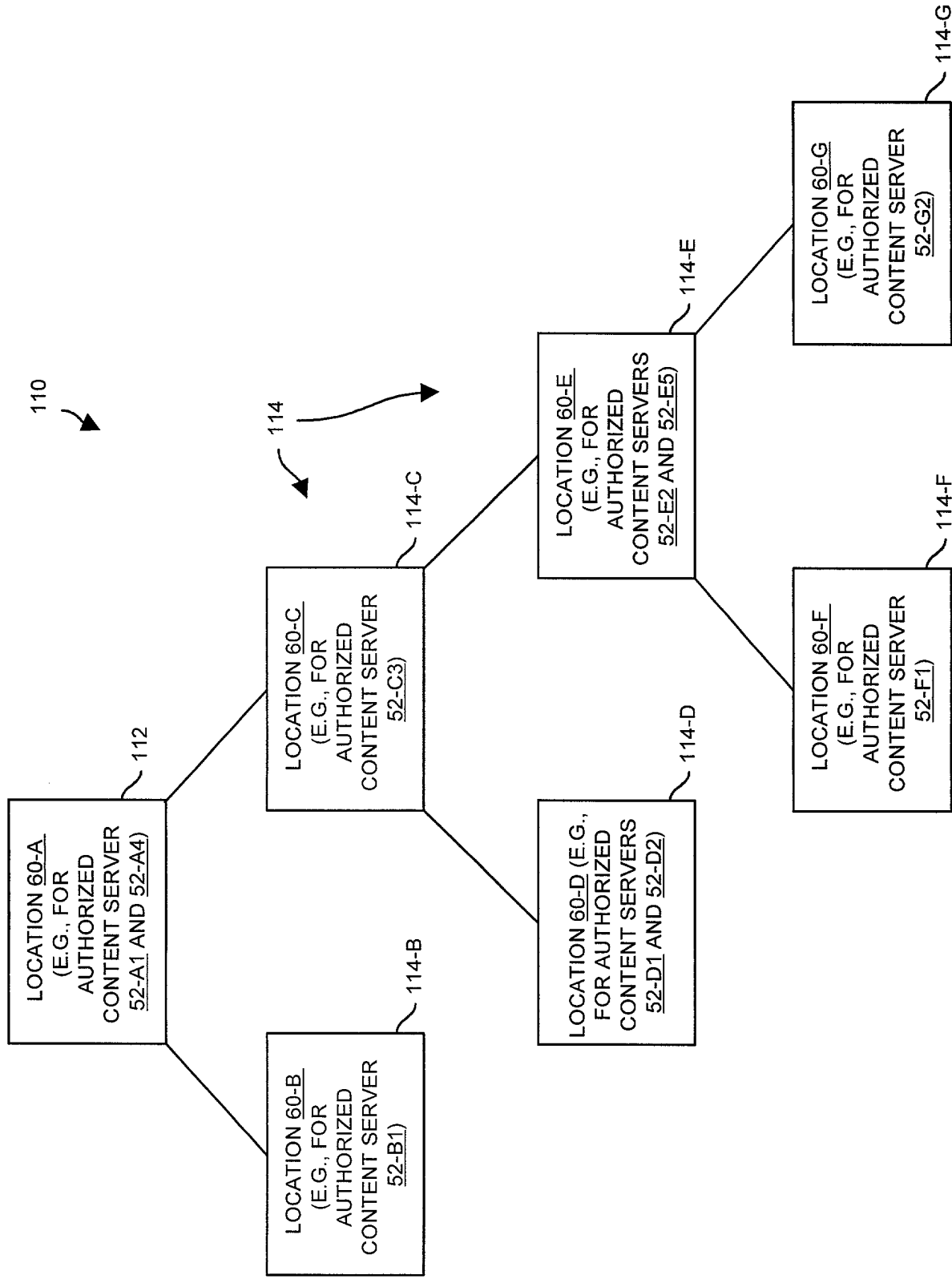


FIG. 9

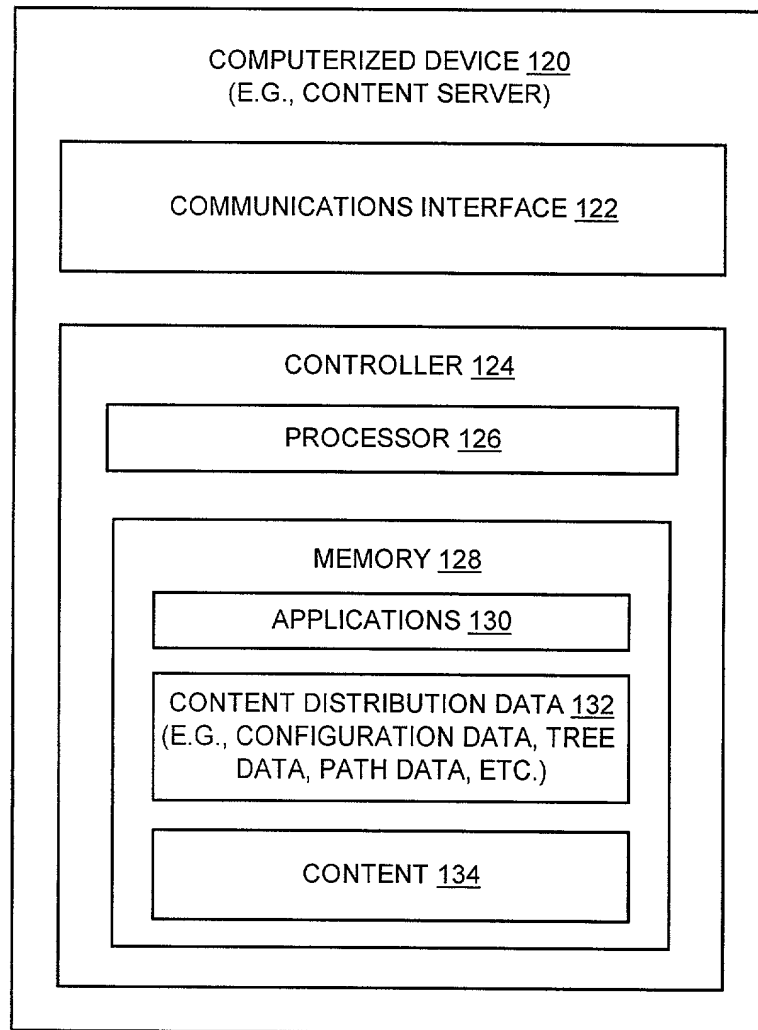


FIG. 10

HOST DOMAIN	AUTHORIZED CONTENT SERVERS	TREE
WWW.HD-1.COM	CONTENT SERVERS 52-A2, 52-A5, 52-B3, 52-B4, 52-C1, 52-C2, 52-D3, 52-D4, 52-E1, 52-E3, 52-F2, 52-F3, 52-G1, 52-G3	23
WWW.HD-2.COM	CONTENT SERVERS 52-A1, 52-A4, 52-B1, 52-C3, 52-D1, 52-D2, 52-E2, 52-E5, 52-F1, 52-G2	23
WWW.HD-3.COM	CONTENT SERVERS 52-A3, 52-B2, 52-B3, 52-F1, 52-F2, 52-F3, 52-C1, 52-E3, 52-E5	17
.	.	
.	.	
.	.	

FIG. 11

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CONFIGURATION DATA 152

TREE FORMING LEADER 156 = (YES/NO)

CONTENT FETCHING LEADER 158 = (YES/NO)

PROBING LEADER 160 = (YES/NO)

AUTHORIZED HOST DOMAINS 161

LOCATION DATA 154

LOCATION IDENTIFIER 162 = (LOCATION ID)

DEVICE IDENTIFIER 164 = (DEVICE ID)

CONSTRAINTS 166 = (E.G., LEAF ONLY,
ANCESTOR OF
DEVICE X ONLY,
ETC.)

•
•
•

FIG. 12

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CONFIGURATION DATA 152

TREE FORMING LEADER 156 = "YES"

CONTENT FETCHING LEADER 158 = "NO"

PROBING LEADER 160 = "YES"

AUTHORIZED HOST DOMAINS 161 = NONE

LOCATION DATA 154

LOCATION IDENTIFIER 162 = "ID FOR LOCATION 60-E"

DEVICE IDENTIFIER 164 = "ID FOR DEVICE 52-E5"

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•
•

FIG. 13

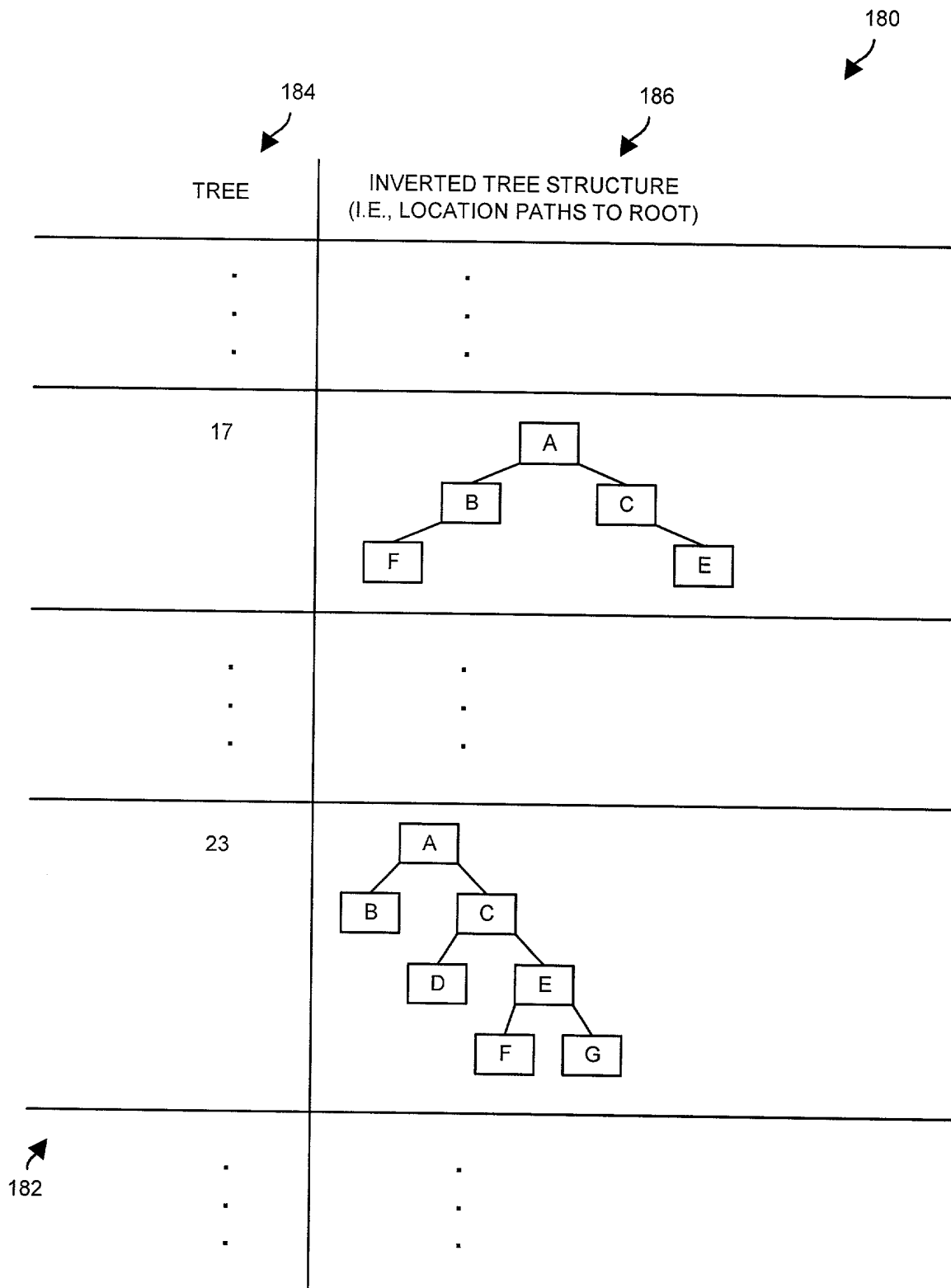


FIG. 14

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CONFIGURATION DATA 152

TREE FORMING LEADER 156 = "NO"

CONTENT FETCHING LEADER 158 = "NO"

PROBING LEADER 160 = "NO"

AUTHORIZED HOST DOMAINS 161 = "www.hd-1.com"

LOCATION DATA 154

LOCATION IDENTIFIER 162 = "ID FOR LOCATION E"

DEVICE IDENTIFIER 164 = "ID FOR DEVICE 40-E1"

•
•
•

FIG. 15

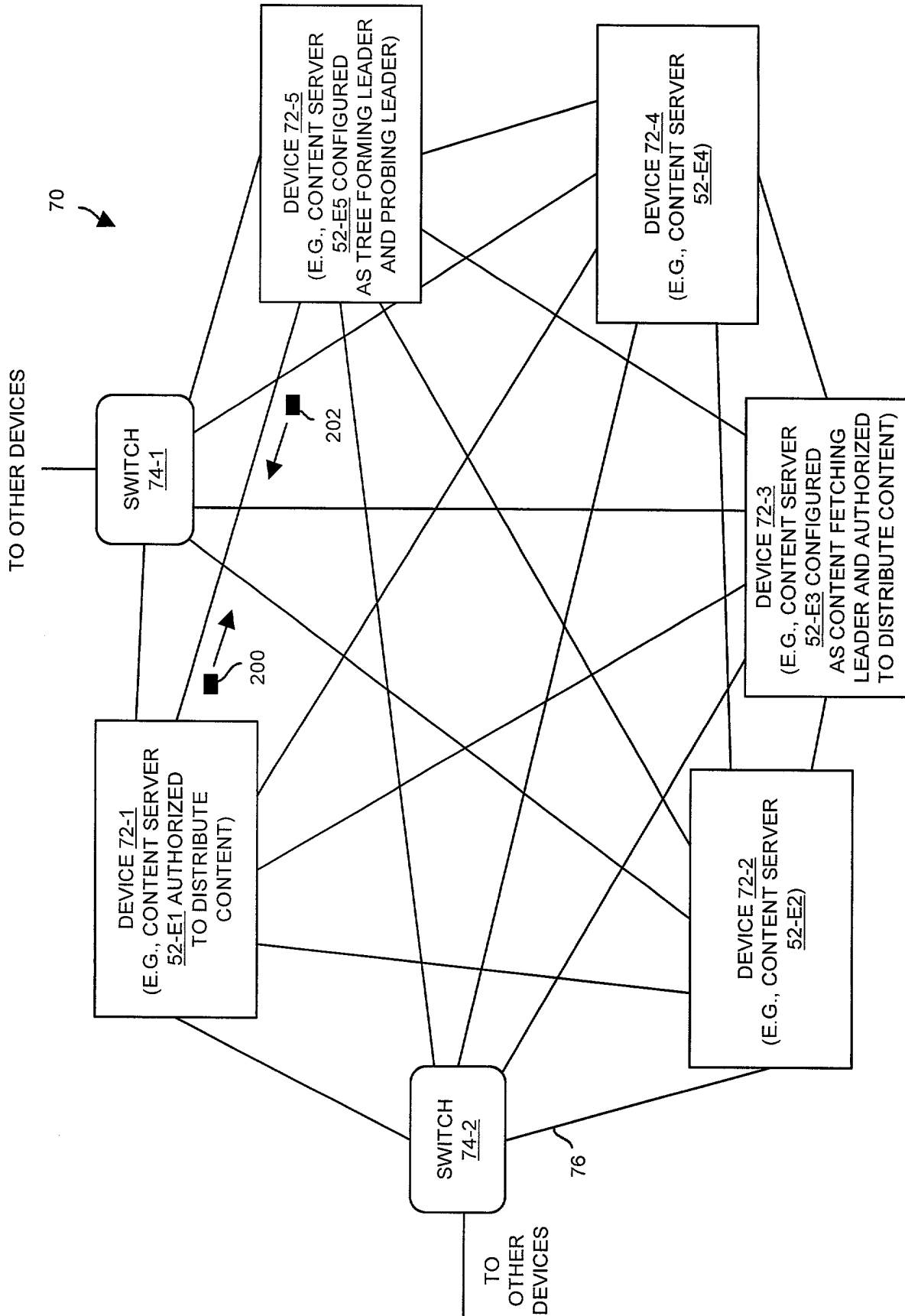


FIG. 16

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CONFIGURATION DATA 152

TREE FORMING LEADER 156 = "NO"

CONTENT FETCHING LEADER 158 = "YES - www.hd-1.com"

PROBING LEADER 160 = "NO"

AUTHORIZED HOST DOMAINS = "www.hd-1.com"

LOCATION DATA 154

LOCATION IDENTIFIER 162 = "ID FOR LOCATION E"

DEVICE IDENTIFIER 164 = "ID FOR DEVICE 40-E3"

•
•
•

FIG. 17

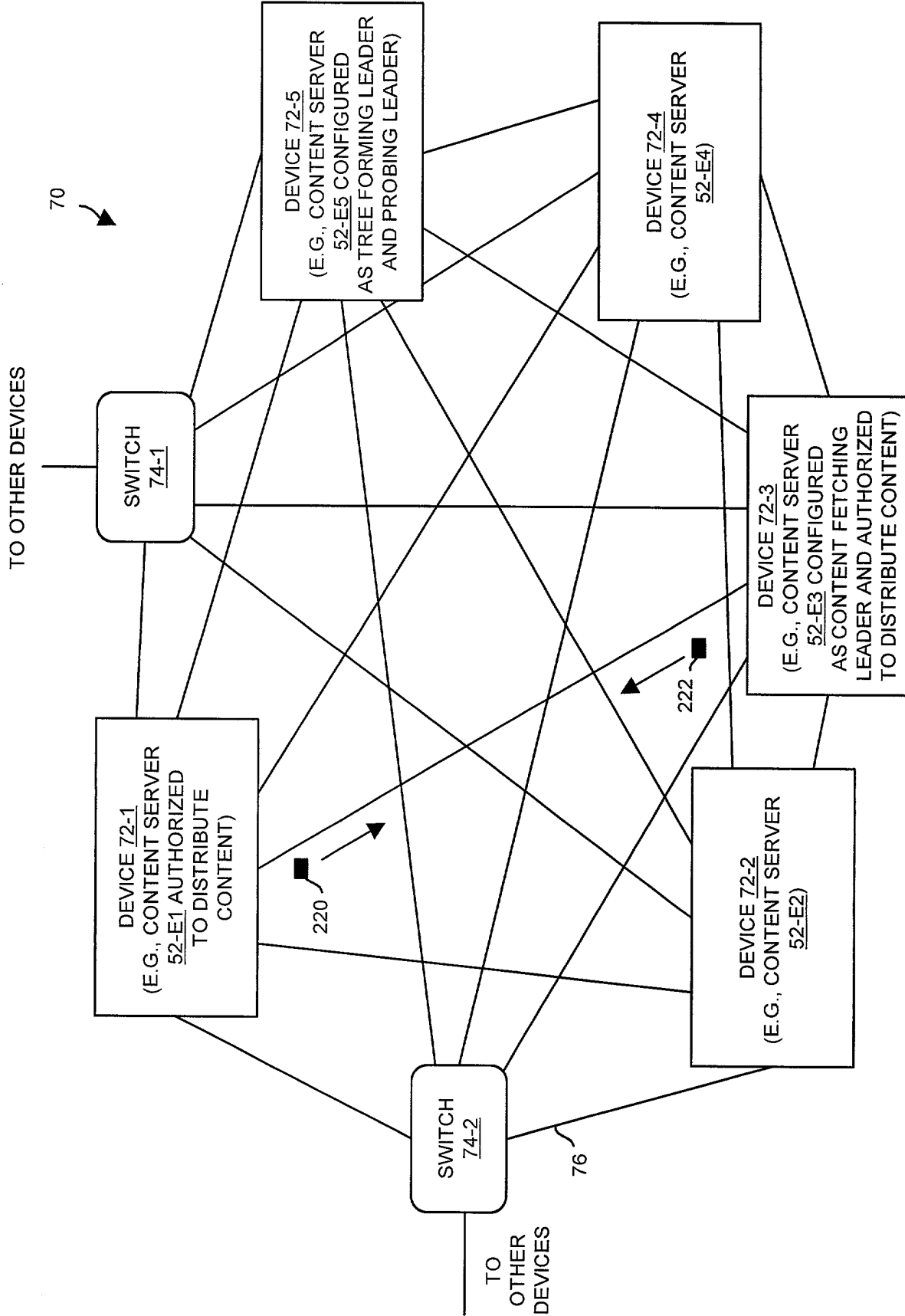


FIG. 18

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234 AUTHORIZED HOST DOMAINS	236 AUTHORIZED SERVERS AT CURRENT LOCATION IN DEVICE PRIORITY	238 TREE
WWW.HD-1.COM	CONTENT SERVER <u>52-E3</u> , CONTENT SERVER <u>52-E1</u> , CONTENT SERVER <u>52-E4</u>	23
WWW.HD-2.COM	CONTENT SERVER <u>52-E2</u> , CONTENT SERVER <u>52-E5</u>	23
WWW.HD-3.COM	CONTENT SERVER <u>52-E3</u> , CONTENT SERVER <u>52-E5</u>	17
⋮	⋮	⋮

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FIG. 19

AUTHORIZED HOST DOMAINS	AUTHORIZED SERVERS AT ALL LOCATIONS IN DEVICE PRIORITY	TREE
WWW.HD-1.COM	CONTENT SERVER <u>52-E3</u> , CONTENT SERVER <u>52-E1</u> , CONTENT SERVER <u>52-E4</u>	23
WWW.HD-2.COM	CONTENT SERVER <u>52-E2</u> , CONTENT SERVER <u>52-E5</u>	23
WWW.HD-2.COM	CONTENT SERVER <u>52-C3</u>	23
WWW.HD-1.COM	CONTENT SERVER <u>52-C1</u> , CONTENT SERVER <u>52-C2</u>	23
<div>232</div> <div>.</div> <div>.</div> <div>.</div>	<div>.</div> <div>.</div> <div>.</div>	<div>.</div> <div>.</div> <div>.</div>

FIG. 20

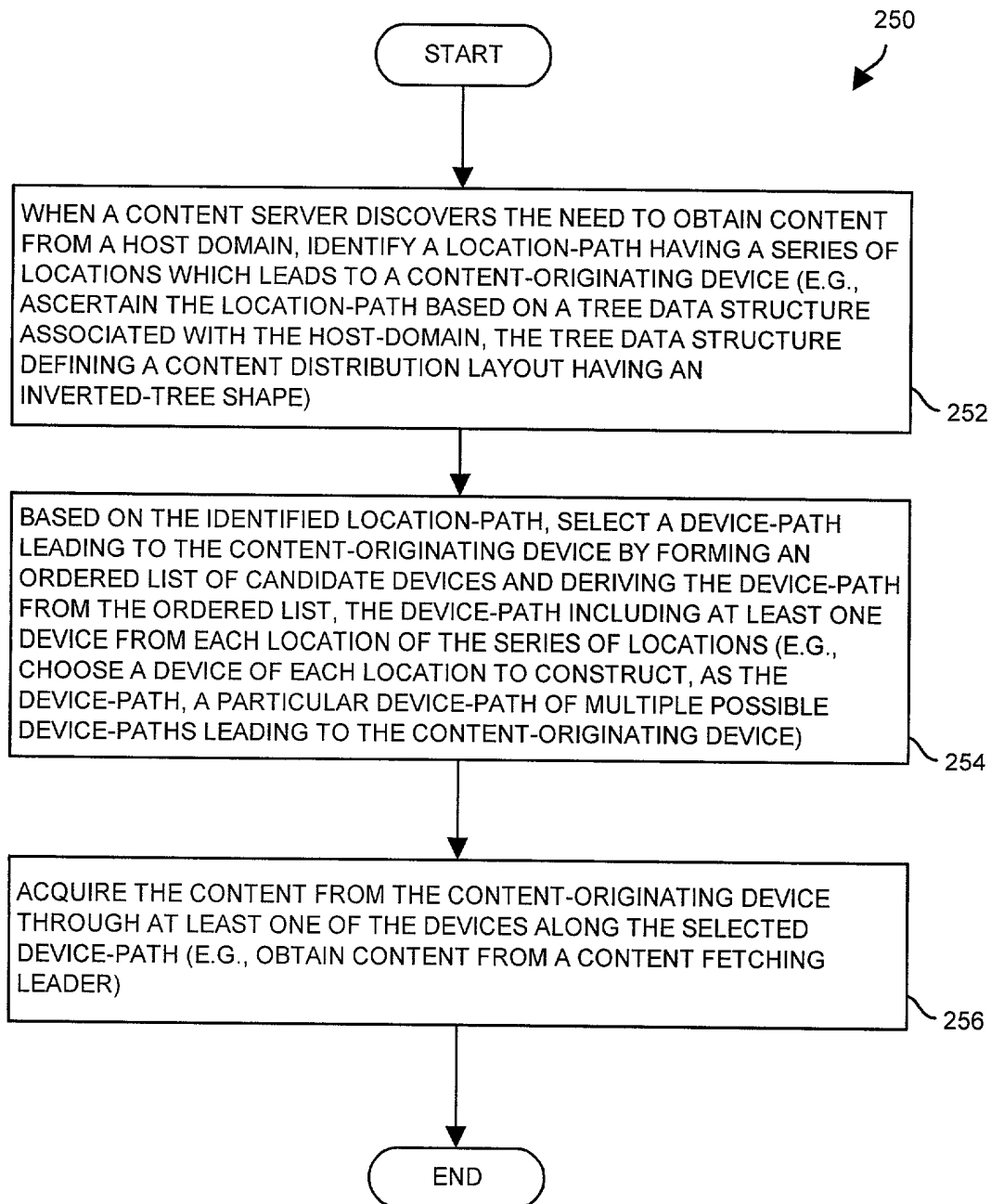


FIG. 21

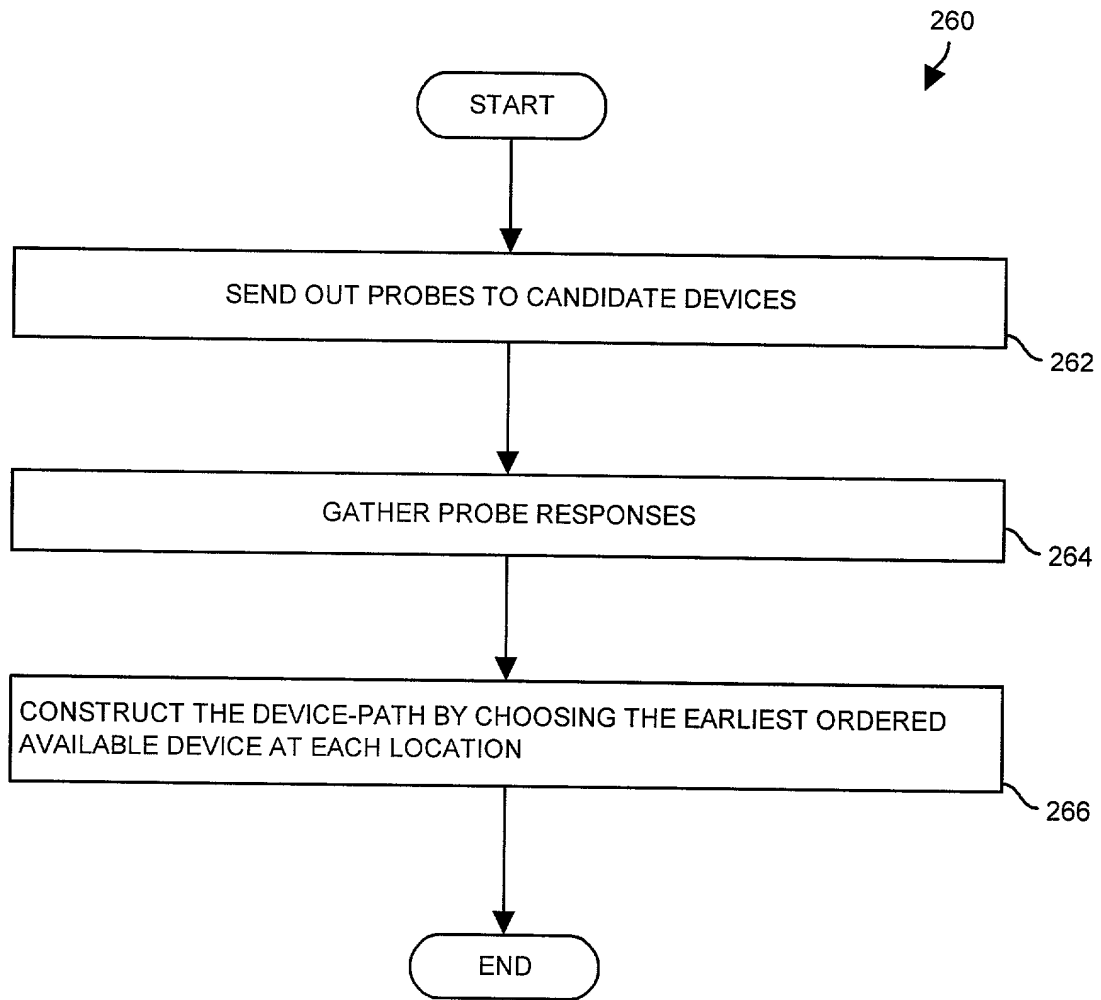


FIG. 22

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LOCATION-PATH 272
FROM CURRENT
DEVICE TO A CONTENT
ORIGINATING DEVICE

CANDIDATE DEVICES 274 WHICH
ARE AUTHORIZED TO SERVE CONTENT
FOR A PARTICULAR HOST DOMAIN
(E.G., ARRANGED IN A HASHED ORDER)

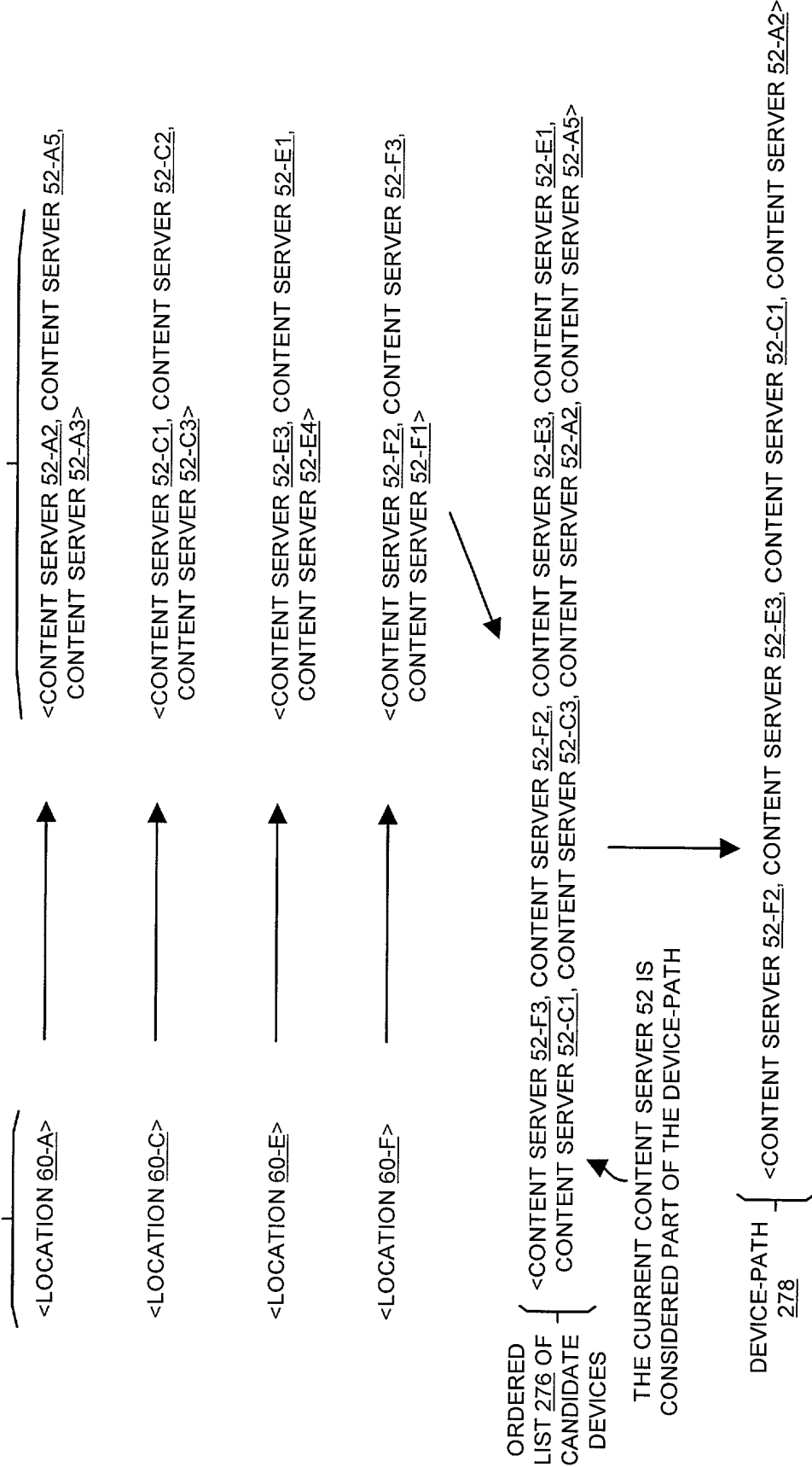


FIG. 23

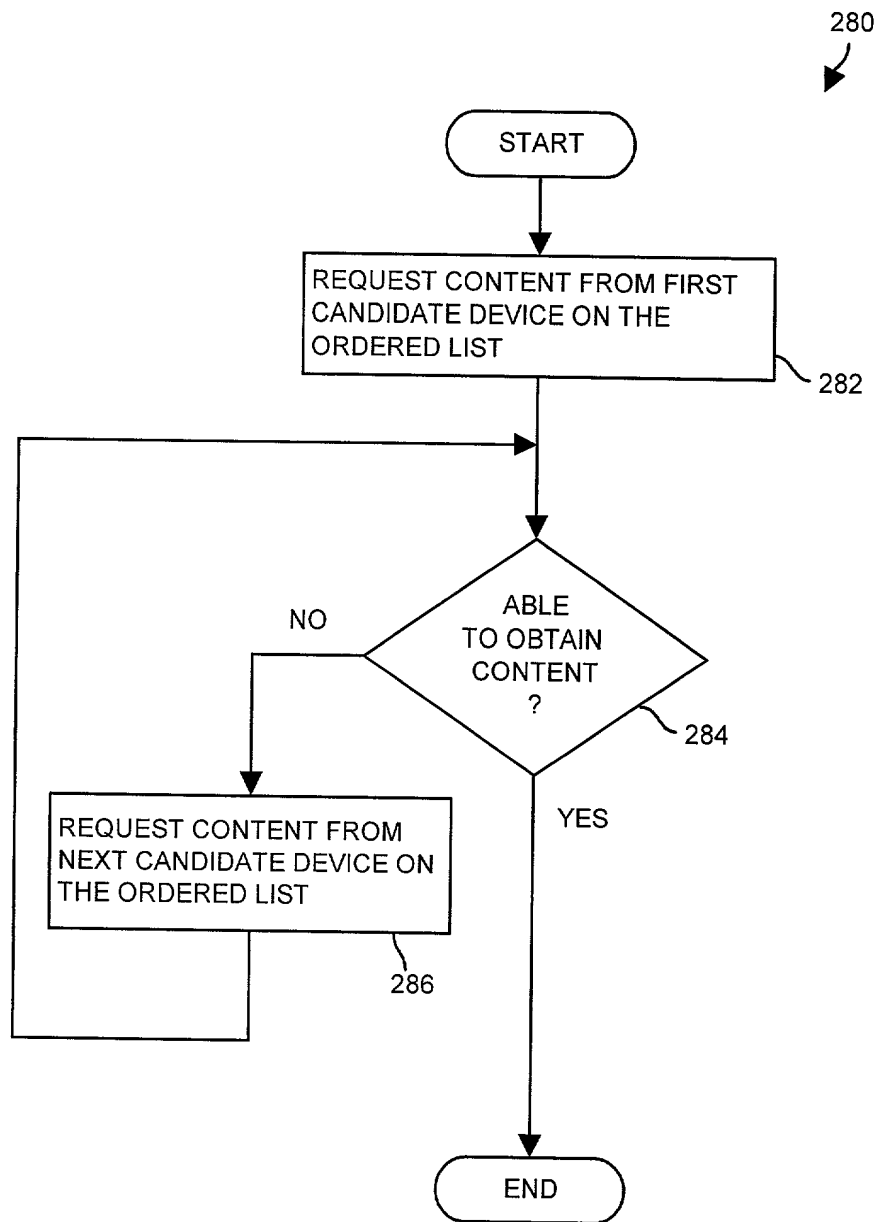


FIG. 24

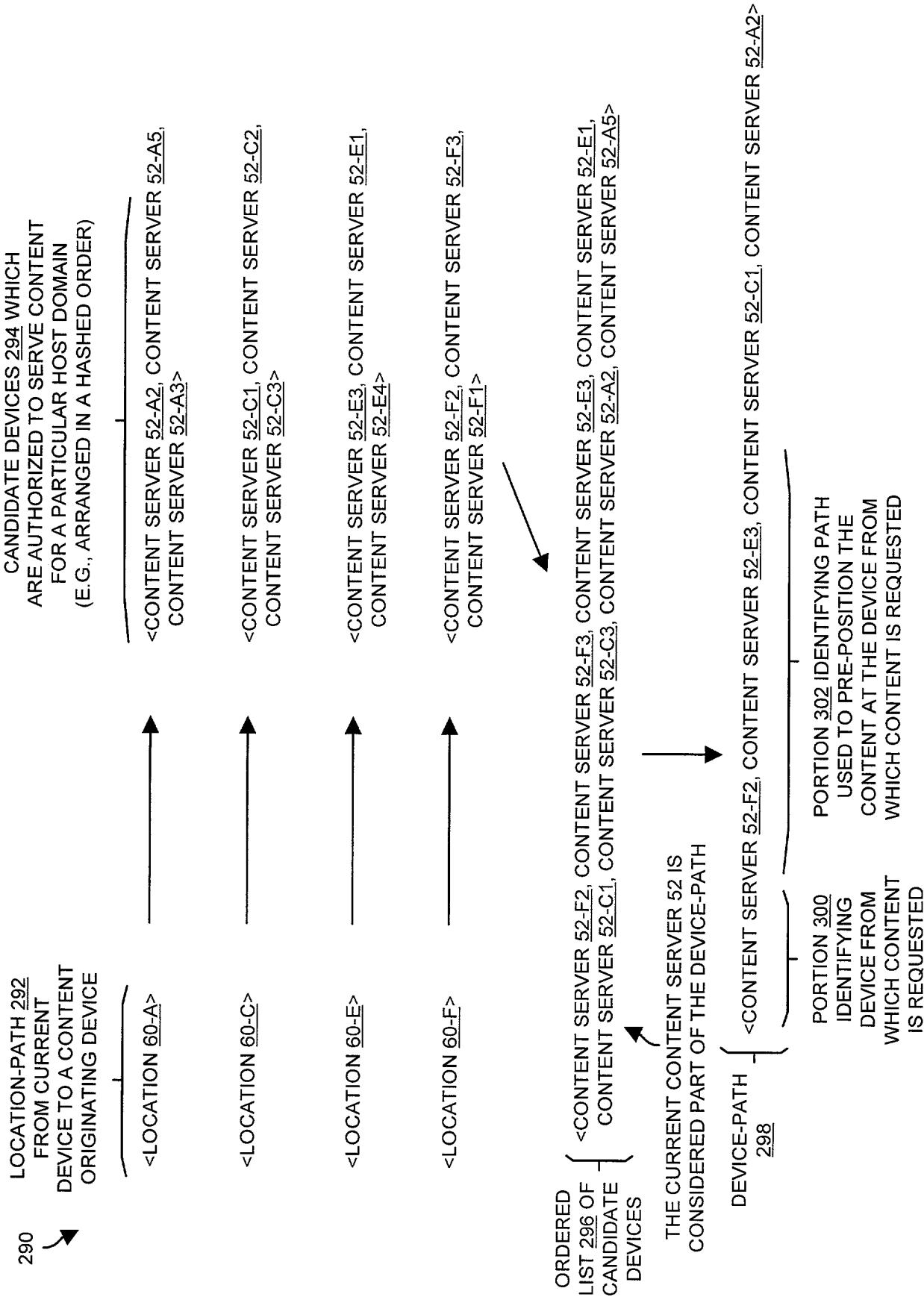


FIG. 25